TELECOMMUNICATIONS COMPETITION SURVEY

FOR RETAIL LOCAL VOICE SERVICES IN IOWA

A Report of the

Iowa Utilities Board

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IUB Authority to Deregulate Competitive Services

It is the policy of the State of Iowa that communications services should be available throughout the state from a variety of providers at just, reasonable, and affordable rates. Iowa Code § 476.95(1) (2003). The Iowa Utilities Board conducted this survey to evaluate the state's progress toward this goal.

Under Iowa law, the Board has a duty to deregulate a communications service or facility if the Board determines that the service or facility is subject to effective competition as defined in Iowa Code § 476.1D. The Board has used this authority to deregulate a wide variety of communications services during the last 20 years, including directory assistance, intrastate long-distance, wireless (cellular) telephone, and pay telephones. In order to make a finding of effective competition, the Board must determine: (1) there are multiple providers of a service and (2) existing market forces are sufficient to ensure just and reasonable rates without regulation. This survey report addresses only the first standard in that finding. The second part requires the exercise of judgment, based on economic principles applied to all of the relevant facts and circumstances.

The Survey

On August 4, 2003, the Board surveyed approximately 280 companies that currently provide, or have the potential to provide, local telephone service in Iowa. Respondents were requested to provide information as of July 1, 2003. A total of 239 telephone service providers, including 93 percent of the wireline carriers, responded. Respondents included Qwest, Iowa Telecom, and Frontier, which are the three major Incumbent Local Exchange Carriers (ILECs[1]); most of the 158 smaller independent carriers (the small ILECs); most of the Competitive Local Exchange Carriers (CLECs[2]) and, some of the wireless carriers. No response was received from 19 wireless carriers, 9 of the smaller ILECs, and 8 of the CLECs.[3]

In Iowa the sheer number of telephone service providers, by itself, may create the impression that Iowans have a choice of basic local voice service providers. However, the raw number of providers does not automatically mean customers have a real choice. For example, the 161 ILECs generally do not compete against each other. Instead, they serve their own, separate service territories.

The survey report shows that most Iowa exchanges, and especially the rural exchanges, have little or no competitive choice while some customers in urban

[1] An Incumbent Local Exchange Carrier, or ILEC, is the local telephone company that provided service to a community prior to 1995, when it had a regulated monopoly over local service in that community.
[2] A Competitive Local Exchange Carrier, or CLEC, is a local telephone company that is competing with an ILEC in one or more of the ILEC's exchanges. Examples include McLeodUSA and MCI.
[3] The non-responders are identified in Attachment D. Because of the nature of the services they offer or their relatively small size, the lack of responses from these carriers should not affect the conclusions drawn in this report.

exchanges may have multiple choices. Overall, the incumbent providers continue to dominate the market as shown by their substantial market shares. The survey shows the ILECs serve 92 percent of all residential lines and 77 percent of all business lines in Iowa. There are some exceptions, but many competitors are only offering to market niches, such as business customers or high-use customers, and are not offering basic voice communications to residential customers.

While some may claim that wireless service is being used as a substitute for traditional voice services, national studies show that less than 5 percent of wireless customers have abandoned traditional basic wireline voice service. Service quality and reliability issues appear to be chief among the reasons many customers have not adopted wireless as a replacement for wireline service, although they may be more willing to use wireless as a substitute for a *second* line, such as a teen line. In addition, the Federal Communications Commission, in its recent Triennial Review Order, stated that, "[n]either wireless nor cable has blossomed into a full substitute for wireline telephony."

The survey report includes a description of new technologies that may substantially increase the degree of customer choice in the future. Most of these technologies are on or just over the horizon. For example, telephone service using the cable television network is currently offered in Council Bluffs and may be available in other areas within the next year. However, new cable telephone service is likely to be based on an emerging technology called "Voice over Internet Protocol," or VoIP, rather than traditional technology. Another potential new technology, broadband service over electric power lines, is the subject of a few tests at this time, but is not yet being tested in Iowa. Some of these new technologies may represent additional competition in the future.

As a part of the survey, the Board asked the carriers to describe their advertising activities in Iowa. The Board believes that advertising is a key indicator of a CLEC's actual level of participation in the local exchange marketplace. Carriers that are not advertising their services probably are not offering service to the general public. The responses show that a few CLECs advertise their services relatively broadly, but many more are engaged in only very limited advertising activities. In fact, many of the CLECs that responded to the survey indicated that they did not advertise in Iowa at all during the preceding 12 months. Moreover, when contacted, some of these CLECs indicated they were not offering any local service in Iowa at this time.

Competition in the Price-Regulated Markets

Turning to the survey data, the results show there are 70 CLECs certified to offer telephone service in one or more Qwest exchanges, but most of these CLECs serve limited areas or markets. Only a few actually offer service to a significant fraction of the general public. As a result, Qwest, the largest incumbent, continues to serve almost 90 percent of the residential lines and over 70 percent of the business lines in its service territory, although its market share in any particular exchange may be higher or lower.

Iowa Telecom, the second largest incumbent local service provider in the state, has competitors in 69 of the 378 communities it serves. In some of those 69 communities Iowa Telecom faces competition, mainly from independent telephone companies that serve adjoining exchanges and from municipally-owned companies. In others, competitors have captured only a small share of the market. Overall, Iowa Telecom continues to serve about 93 percent of the residential lines and 81 percent of the business lines in its service territory.

Frontier has competitors in 4 of the 49 communities it serves, but the competitors serve only a few business customers. There are no competitors serving residential customers in Frontier's territory. Thus, Frontier serves 100 percent of the residential lines and 99 percent of the business lines in its service territory.

Competition in the Nonprice-Regulated Markets

There are 158 small incumbent carriers serving the state and competition has emerged in 31 of the 419 communities where they provide service. In 29 of those 31 communities, the CLECs serve only a handful of customers. The survey responses show just two communities where CLECs have gained much market share. Both of those CLECs are municipal utilities. On a statewide basis, the small ILECs continue to serve over 99 percent of the customers in their communities.

There are 14 Iowa municipal utilities providing competitive telecommunications service in their communities. Typically, the municipals compete with the incumbent telephone company. In some instances, the municipals estimate their share of the market in the community they serve to be as high as 70 percent. Municipals are a source of competition in some exchanges; however, they tend to offer service only within their own boundaries and do not try to expand to other geographic markets.

General Findings

Overall, the Board found there is slight to moderate competition in some areas of the state, with certain specific areas or customer groups (business customers in urban exchanges, for example) having a choice of providers. Statewide, market shares indicate that in most areas the ILECs continue to dominate the market and the majority of Iowans do not have a significant choice of local telephone service providers. This finding is consistent with the findings of other states that have studied this issue.

In November 2003, the National Regulatory Research Institute (NRRI) at The Ohio State University released its report on State Analysis of Competition in Telecommunications Markets: Results of an NRRI Survey. The NRRI survey found:

> The majority of the responding state commissions [46] reported that they have conducted some form of formal competition analyses for the intrastate telecommunications markets (local service, intraLATA toll service, and intrastate,

interLATA service markets). Other states may be doing informal analysis or monitoring competition. Almost half the states conducted competition analyses on a regular basis (e.g., annually).

According to the state commissions' assessments, competition in local service markets seems to be in an early stage of development, whereas competition in the long distance markets has developed considerably so far, although it may not be mature yet. Most state commissions found the local service markets either "slightly competitive" or "not competitive" rather than "fully competitive" or "moderately competitive"; in contrast, the majority of the responding states that had analyzed long distance markets found them either "fully competitive" or "moderately competitive."

The growth of local exchange competition is being slowed by several national events. First, the economic downturn of the last several years has affected investment in the telecommunications industry. Second, pending FCC action on the pricing of the regional Bells' networks is contributing to uncertainty in the business plans of possible competitors. FCC decisions in this area may, in fact, discourage competitors from leasing lines from the Bells, further inhibiting the ability of many companies to compete.

On the positive side, new technologies that are on or just over the horizon may offer the greatest potential for future competition in the telecommunications sector.

LIST OF ACRONYMS AND DEFINITIONS

1996 Act – The Telecommunications Act of 1996. Federal legislation that opened the local exchange telecommunications marketplace to competition on a nationwide basis.

CLEC – Competitive Local Exchange Carrier. A company that offers local exchange services in competition with the ILEC, or incumbent local exchange carrier, in a particular area or telephone exchange.

DSL – Digital Subscriber Line. A broadband data service provided using the existing telephone wires.

EAS – Extended Area Service. An expansion of the local calling area for a community to include one or more adjoining exchanges, usually for an additional charge.

FCC – Federal Communications Commission.

ILEC – Incumbent Local Exchange Carrier. The telecommunications company that offered local exchange service in a particular community prior to passage of the 1996 Act.

IUB – Iowa Utilities Board.

LEC – Local Exchange Carrier. Any telecommunications company that offers local telephone service.

RBOC – Regional Bell Operating Company. The former Bell System telephone companies and their successors and assigns. In Iowa, Qwest is the RBOC.

ROR – Rate of return. The percentage of net profit which a telephone company is authorized to earn on its rate base.

TRO – Triennial Review Order. An order issued by the FCC which may affect the continued availability of UNE-P.

UNE – Unbundled Network Element. Each of the various services and facilities that goes into providing local telephone service, including the wire loop that serves the customer and switching services.

UNE-P – Unbundled Network Element-Platform. The combination of all of the UNEs necessary to provide local telephone service.

VoIP – Voice over Internet Protocol. A method of changing voice calls into data packets and sending them on the Internet or a similar network. Near the destination they are reassembled and delivered like traditional calls.

I. INTRODUCTION

A. Purpose and Design of the Study

On August 4, 2003, the Iowa Utilities Board (Board) initiated a survey to obtain a snapshot, as of July 1, 2003, of the status of competition within the state of Iowa. This activity is part of the Board's on-going evaluation of competition for local telephone service. The survey was sent to incumbent local telephone exchange carriers (ILECs), competitive local exchange carriers (CLECs), cable television operators, and wireless service providers offering services within the state. Also included were organizations or service providers with the potential of providing retail local voice services, even if they do not provide local voice service at this time.

At the time of this survey, wireless service was not generally considered to be a substitute for basic voice services. Nationally, only 3 to 5 percent of consumers have "cut the line" and adopted wireless service as their primary voice service. As discussed in greater detail below, most industry observers and public utility commissions have concluded that for most customers, wireless service is still a complementary service to traditional wireline service rather than a substitute for it. Nonetheless, wireless companies were included in the survey process so that measurements could be obtained to determine the level of penetration within various geographical areas of the state.

The survey instrument was divided into three sections: (1) a count of the number of retail local voice service customer connections being provided by each carrier to consumers in each community it serves, to show the relative market shares of the various carriers in each community; (2) the monthly pricing of services and other recurring charges, to permit an evaluation of the services offered by each carrier; and, (3) the level of advertising or marketing used by each of the service providers, as an indicator of their efforts to obtain customers in Iowa. A copy of the survey instrument is included in this report as Attachment A.

1. Retail Local Services Connections

For the purpose of this survey, the definition of retail local voice service connections follows Iowa Administrative Code 199-39.2(1) and the definition of supported services under Federal Universal Service Fund rules. Generally speaking, the survey was directed to carriers that offer voice-grade services such as dial tone, access to long distance service, and access to emergency services (911 or E911).

This information was requested for two reasons. First, these responses allowed the Board to calculate each carrier's market share in each exchange, showing areas where competition has been more effective. Second, these responses will establish a base line for measuring growth when combined with future survey results.

2. Retail Pricing Information

The second part of the survey asked for retail local voice service pricing information to allow an evaluation of the services offered by each carrier and to determine the market that each carrier is targeting.

In the past, this request might have only included pricing for basic local service. However, many competitors now offer bundled services that include basic local voice service as one component. For this reason, the responses to the pricing request included service offerings that ranged from the simplest local service to bundled packages that may include such services as local calling, minutes of use for long distance calling, and custom features such as call waiting, caller identification, call forwarding, and three-way calling, among other features.

The survey also requested information on some of the other monthly recurring charges that the consumer would be required to pay when obtaining retail local voice services. It focused on charges that are likely to vary from one carrier to the next, in order to allow a comparison of the total bills a customer might experience with each carrier. These charges included the federal subscriber line charge for single line business, residential, and multiline business accounts. Emergency dial 911 fees are included because they can vary from one county to the next. The survey did not request amounts for the Federal Universal Service Fund charges or state and federal taxes since these amounts are relatively uniform percentages that can be applied to the pricing of the services from any company.[4]

3. Advertising Information

The survey also asked for advertising information from each service provider. This information was requested to determine whether the service is being offered to the public generally, only to specialized markets, or not really being offered at all.

Specifically, each provider was asked whether it advertised, how many months out of the last 12 (July 2002 through June 2003) it advertised, and how it advertised. The respondents were also asked to identify the types of advertising they used, such as newspaper, television, Internet, radio, billing insert, direct mailing, telemarketing, telephone directory, or other media. The extent of a carrier's advertising is one way to evaluate the nature of the carrier's offering. Carriers that are offering their services to the general public are likely to use several forms of advertising, while carriers that are aiming at niche markets tend to use more limited forms of advertising.

[4] Federal Universal Service Fund charges range from 8 to 11 percent and are adjusted quarterly to reflect total fund requirements. This charge is only applied to billed interstate charges. The federal excise tax is 3 percent and is applied to all toll and local service charges. Iowa sales tax rate is 5 percent. Some locations may also have a local option sales tax of 1 percent. Additionally, billings to consumers may also contain city or county taxes, school infrastructure taxes, and a charge for service provider number portability.

4. Confidential Information

Initially, many of the service providers expressed reservations about providing specific customer connection counts in the areas they serve if there was a possibility that the information might become public. Some of the service providers were concerned about market share exposure, while others were concerned that the survey would identify the lack of competitors in specific markets and encourage competitors to enter those service areas.

On August 19, 2003, the Board issued an order in Docket No. WRU-03-49, In re: 2003 Telecommunications Competition Survey for Retail Local Voice Services, describing the confidentiality procedures the Board would apply to the survey responses. In the order, the Board recognized that access line information on an individual company basis could give an advantage to competitors, while the release of the specific information would not serve any public purpose.[5] Accordingly, the Board tentatively concluded that the exchange-specific access line information qualified for confidential treatment under the Iowa Open Records Act and the Board's rules. As a result, the final report does not discuss or include confidential information from individual companies. It includes only publicly-available information, aggregated information, and other information in a format such that it would not be possible to reconstruct company-specific confidential information.

5. The Survey Process

The Board made every effort to encourage companies to respond to the survey. Early on the Board determined that 275 organizations could potentially respond to the survey. On September 2, 2003, the requested return date, over 63 percent of the companies had provided responses. Through multiple follow-up contacts with the non-responders, a response rate of over 86 percent was achieved by November 24, 2003.

In the end, out of the 275 entities identified, 239 responded to the Board's voluntary request for information. The remaining 36 organizations, identified in Attachment D, indicated that they would not provide information or otherwise failed to respond. The mixture of service providers not responding or refusing to provide information consisted of 19 wireless companies, 8 CLECs, and 9 ILECs. Thus, the wireline response rate was 93 percent.

Wireless carriers provided the greatest challenge for obtaining information. The Board deregulated mobile telephone service and paging services in Iowa on August 7, 1986, in Docket No. INU-86-2. As a result of that deregulation, there is no requirement for the wireless companies to obtain certification from the Board prior to providing service in Iowa. While it was still possible for the Board to identify the wireless carriers providing service in Iowa, it was sometimes difficult to determine the location of their operations and the appropriate individual to contact within an organization for the needed

[5] Iowa Code § 22.7(6); 199 IAC 1.9(8)"b"(3).

information. Several of the wireless companies refused to respond, indicating they felt it was beyond the Board's jurisdiction to request the information.

6. Verification of Survey Responses

Once data was received from the responding service providers, the line count or customer connection counts were verified for reasonableness. Several sources were used to accomplish this, including reports generated by the Universal Service Administration Company (USAC), information provided by carriers for the Board's Telephone Utility Annual Report, confidential information compiled by the North American Numbering Plan Administrator in its Number Resource Utilization/Forecast reports, and various filings made by service providers in recent dockets before the Board, e.g., a recent deregulation petition filed by Qwest in Docket No. INU-03-4. These comparisons indicated the survey responses were accurate and reliable, especially considering the timing differences of the various reports.

One concern was that the number of non-responding wireless carriers might affect the survey analysis. Based on the information from the verification sources, it appears the percentage of telephone numbers being utilized by the non-responding wireless companies amounts to approximately 13 percent of the telephone numbers in use within the state. This is not a significant factor in the survey analysis, given the limits on competition between wireless and wireline service providers, described below.

B. Background of Telecommunications Regulation in Iowa

1. Different Carriers Are Subject to Different Regulation

There are several types of telephone companies that provide local service in Iowa today. These include large Incumbent Local Exchange Carriers (ILECs), small ILECs, Competitive Local Exchange Carriers (CLECs), and wireless carriers. ILECs are telephone companies that were providing local exchange service when the Telecommunications Act of 1996 (1996 Act) was enacted. Generally speaking, ILECs do not compete in each other's service territory, although there are exceptions.

Iowa has more ILECs than any other state.[6] At present, there are 161 different ILECs providing local exchange service. Of these, 158 are comparatively small, independent carriers. The remaining three are the large incumbent carriers: Qwest Corporation (Qwest), Iowa Telecommunications Services, Inc. (Iowa Telecom), and Frontier Communications of Iowa (Frontier).

Large ILECs, small ILECs, and CLECs are subject to different forms of regulation. All incumbent and competitive carriers are subject to service quality regulations, but only the large ILECs are subject to rate regulation by the Board. Wireless telephone companies are not subject to rate or service quality regulation, as the Board deregulated that market in 1986.

[6] The next state is Minnesota, with slightly more than 100 total telephone companies.

The regulation of an incumbent carrier's local service rates is determined by its size, as measured in access lines. Generally, telephone companies serving 15,000 or more access lines are subject to rate regulation under the authority granted to the Board. Only Qwest, Iowa Telecom, and Frontier currently exceed this threshold and are subject to rate regulation. Until 1995 the Board established the rates for these companies using the traditional "rate of return" (ROR) form of regulation. This sets rates based on each company's cost of providing regulated services, including an opportunity to earn a reasonable profit on the company's investment in Iowa.

In 1995 the Iowa General Assembly passed legislation to allow large ILECs to base their rates on general economic conditions rather than costs. This form of regulation, known as price regulation, sets price caps for basic communications services. Those prices are periodically adjusted based on an inflation index and, originally, a productivity factor. The productivity factor was repealed in two steps in 2002 and 2003. In Iowa, two different price regulation plans were established, with application based on the size of the company. In 1995 Frontier and GTE (now known as Iowa Telecom) opted into price regulation. In 1998 U S West (now known as Qwest) also opted into price regulation. The price regulation plans are supervised by the Board and are updated periodically to meet current economic conditions. For example, in the last few years each of the price regulation plans has been modified by the Board to include a provision that allows the carrier to reduce its rates in selected communities in order to meet competition.

Price regulation for large ILECs is not unique to Iowa. A recent report published by the National Regulatory Research Institute (NRRI) finds that there are 41 states that apply price regulation to ILECs.[7] This report also finds that there are four states, including Iowa, which apply price regulation to the large ILECs, but do not regulate the rates of the small ILECs. The NRRI results are summarized in the map attached to this report as Attachment B.

Iowa's regulation of CLECs is minimal. Under Iowa Code § 476.29, a CLEC must receive a certificate of public convenience and necessity and file a tariff before it is authorized to offer local service in Iowa. Applications for certificates are typically granted very quickly. However, as will be discussed in greater detail below, the grant of a certificate does not mean a CLEC is actually providing service in Iowa.

The local service rates offered by competitive carriers generally are not subject to rate regulation by the Board. They are free to charge market-based rates for their services. If, however, a CLEC displaces the incumbent and becomes a new monopoly, it can be regulated, but only to the degree necessary to restrain the company's market power.

[7] NRRI, "State Retail Rate Regulation of Local Exchange Providers," June 2003, Table 1, p. 1.

2. Deregulation of Competitive Services

Iowa Code § 476.1D requires that the Board deregulate a communications service or facility if the Board determines that the service or facility is subject to effective competition. In making that determination, the Board must consider, among other factors, (1) whether a comparable service or facility is available from a supplier other than the telephone utility and (2) whether the resulting market forces are sufficient to assure just and reasonable rates without regulation. Basic economic theory[8] suggests that these requirements are among the minimum necessary conditions to ensure the existence of a competitive market.

Moreover, it is the policy of the State of Iowa that communications services should be available throughout the state, from a variety of providers, at just, reasonable, and affordable rates.[9]

In furtherance of this policy, the Board has deregulated a wide variety of communications services and facilities during the last 20 years including, but not limited to, the following:

- Local directory assistance services (2001)
- Non-local directory assistance (1996)
- All intrastate long-distance services (in two stages, in 1989 and 1996)
- Wireless (cellular) telephone service (1986)
- Paging services (1986)
- Pay telephone services (1985)
- Centrex services (1984)
- Customer-owned telephone equipment (1983)

In order to deregulate a service or facility, the Board applies the procedures and standards from the statute and the Board's rules.[10] The rules specify a process by which the public is given notice of a proposed deregulation and an opportunity to comment on the proposal. For proposed new services, an expedited process must be completed within four months; for deregulation of existing services, the process takes from three months to a year, depending upon the complexity of the issues and other factors.[11]

Pursuant to the Board's rules, interested persons can file written statements of position and counter-statements, following which an oral presentation is held. The Board's decision is based on the resulting record. In making its decision, the Board will consider whether any provider has the ability to control prices in the marketplace; whether other

[8] See, for example, The Regulation of Public Utilities, Charles F. Phillips, Jr., Public Utilities Reports, Inc. (1988), pp. 54-61.
[9] Iowa Code § 476.95(1).
[10] 199 IAC chapter 5.
[11] For example, the proceedings to deregulate wireless service took five months; billing and collection services were deregulated in three months; interLATA long distance took six months; local directory assistance took 12 months.

potential providers can enter the market easily and whether they are likely to do so; and, whether there are alternative services that can be substituted for the service proposed for deregulation. Again, these factors are consistent with well-established economic theory regarding competitive markets and are used, in one form or another, by practically every state public utility commission that has authority to deregulate telecommunications services.

The statute and the Board's rules allow the Board to deregulate only the price of a service while retaining service quality regulation. However, the Board has never found it necessary to take this intermediate step. Instead, the Board has fully deregulated every service that it has determined to be subject to effective competition.

As described above, the Board has deregulated dozens of services in at least 14 different dockets since 1983, but only when the services were subject to effective competition sufficient to prevent monopoly behavior. In the absence of effective competition, unregulated monopolies would be able to raise prices to unreasonable levels with undesirable effects on society. Moreover, an unregulated provider with some monopoly services could engage in predatory pricing; that is, it could reduce prices in markets where it faces limited competition and support the losses with monopoly profits from other exchanges. The result is to drive any potential competitors out of the market and deter others from entering the market. While this would probably be a violation of antitrust laws, the fact is that few, if any, of the existing competitors have the resources to bring such a case against a monopoly provider. For all of these reasons, it is important that a service or facility not be deregulated until it is, in fact, subject to effective competition. This is a very fact-sensitive determination that can change over time.

The Board has deregulated many services, but on two occasions the agency found that at the time the case was heard, the record did not support deregulation of local exchange services. The first such case involved an ILEC, South Slope Cooperative Telephone Company, Inc., that constructed new facilities to serve parts of the U S West exchanges in Coralville and Cedar Rapids, Iowa. U S West requested deregulation of its local exchange services in these communities, arguing that the presence of South Slope amounted to effective competition. In March 2000 the Board denied the request, finding that it was impractical to deregulate only the small parts of these exchanges where South Slope was competing with U S West. The Board also expressed concern that with only two competitors, the market might develop into a duopoly rather than a truly competitive market. (A duopoly is like a monopoly, but with two sellers rather than one. Economic theory indicates that duopolies may not develop into, or always behave like, competitive marketplaces due to the likelihood of implicit or explicit collusion, price following behavior, and other market distortions.)

In 2001 Iowa Telecom filed a petition to deregulate nine of its exchanges where it was experiencing competition. In each of the nine exchanges, there was only one competitor, but some of those competitors had made substantial inroads into Iowa Telecom's market share. The Board denied the petition, concluding that having only

two telephone companies in each of the exchanges created a duopoly that would not provide effective competition or assure reasonable rates without regulation, and there was little prospect of additional competitors entering these markets. Moreover, complete deregulation could have allowed Iowa Telecom to reduce its rates below cost in these nine exchanges, driving the competitor out of business and creating a strong disincentive for any potential new competitors. Therefore, the Board denied Iowa Telecom's request for deregulation.

C. Description of Relevant Federal Laws

1. The Telecommunications Act of 1996

As part of the break-up of the Bell Telephone system in 1984, the resulting Regional Bell Operating Companies (a/k/a RBOCs, which include Qwest's predecessor U S West) were prohibited from offering interstate and most intrastate long distance services. This prohibition was addressed in the federal Telecommunications Act of 1996, which opened the local exchange markets to competition. When the 1996 Act was being drafted, there was recognition that if local telephone service was to become competitive, the RBOCs would have to lose market share in their existing local exchange monopolies.

The trade-off for this loss of market share was to permit the re-entry of the Bell Operating Companies into the long-distance markets through applications filed pursuant to 47 U.S.C. § 271. This federal statute basically provides that if a Bell Operating Company can show that its local exchange system is open to competition, it can re-enter the long distance market. The level of competition necessary to comply with the requirements of this section is less than the "effective competition" standard that is typically used to deregulate a service. The Federal Communications Commission (FCC) concluded that the § 271 requirement is satisfied if one or more competing providers serve residential and business subscribers and that no particular level of market penetration is required.[12]

The 1996 Act also differentiated between small and large carriers. Generally, each telecommunications carrier has the duty to interconnect with other telecommunications carriers.[13] Further, each ILEC has the duty to negotiate agreements regarding resale of its telecommunications services, number portability, the provision of dialing parity, access to its poles, ducts, conduits, and rights-of-way, and the establishment of reciprocal compensation arrangements for the transport and termination of telecommunications.[14]

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[12] *In the Matter of Application by Qwest Communications International, Inc. for Authorization To Provide In-Region, InterLATA Services in the States of Colorado, Idaho, Iowa, Montana, Nebraska, North Dakota, Utah, Washington, and Wyoming,* WC Docket No. 02-314, paras. 20-21. (Rel. December 23, 2002).
[13] 47 U.S.C. § 251(a)(1).
[14] 47 U.S.C. §§ 251(b) and (c).

However, the 1996 Act exempted certain rural telephone companies from the duty to negotiate agreements with all of these terms and conditions. This rural exemption can be lifted for a particular company by the state public utility commission if the commission concludes that the company is technically and economically capable of fulfilling the duty and it is in the public interest to lift the exemption.

2. Pending FCC Actions

Many CLECs in Iowa rely upon the ILEC's wholesale services to provide their own retail services. In other words, these CLECs "rent" the use of the ILEC's facilities at a wholesale rate and use those rented facilities to offer service to customers. The viability of this approach depends upon the price of these wholesale services; if the spread between the wholesale price and the ILEC's retail price is too small, then these CLECs cannot stay in business. Current wholesale prices in Iowa, which are set by the Board using a formula required by the FCC, appear to be in a range that allows the CLECs to survive. However, there is reason to believe this situation may change in the near future.

The FCC is currently reviewing the system it has established to determine ILEC wholesale prices in Iowa and elsewhere.[15] It appears the FCC is concerned that some wholesale services may be priced too low, which is undermining investment incentives. Incumbent LECs have a reduced incentive to invest in their networks for the benefit of their competitors, while CLECs have little incentive to invest in their own facilities if they can purchase the same services from the ILEC at lower cost. As a result, it is possible that the FCC will change the system that is used by the states to set these wholesale prices so that the resulting prices will be higher. If this occurs, some CLECs may go out of business and others may limit their service offerings even more narrowly in order to focus on the market segments where they think they have the best chance of earning a profit.

There is another FCC action that has a bearing on this subject, as well. The FCC recently issued its Triennial Review Order (TRO),[16] which could have a major effect on the CLECs doing business in Qwest territory. In the TRO, the FCC found that if an ILEC can show that three or more CLECs are using their own facilities, in whole or in part, to compete with the incumbent, then the incumbent should no longer be required to offer a particular wholesale service, known as UNE-P, to its competitors in that market.[17] Iowa has several CLECs that rely upon UNE-P to offer service to their

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[15] *In the Matter of Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers,* WC Docket No. 03-173, Notice of Proposed Rulemaking. (Rel. September 15, 2003).

[16] *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability,* CC Docket Nos. 01-338, 96-98, and 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking. (Rel. August 21, 2003).

[17] "UNE-P" is an acronym for "Unbundled Network Elements – Platform." Under federal law, Qwest (along with other large ILECs) is required to sell its services to its competitors on a wholesale basis, either

customers.[18] If Qwest is able to meet the TRO test and no longer has to sell UNE-P in Iowa, the continued existence of those CLECs may be threatened.

II. DESCRIPTION OF POTENTIAL ALTERNATIVES

A. Traditional Wireline

As of November 2002, 104 million households in the U.S. had telephone service.[19] This represents 95.3 percent of all U.S. residences, up from 91.4 percent in November 1983. Even though the percentage of households with telephone service has increased, the number of access lines has been on the decline since 2000. This reduction can be attributed in part to the economy and, in part, to customers using alternative communication methods (such as wireless phones and e-mail) in place of the traditional wireline telephone calls, especially with respect to second lines. For example, in 1988, 2.7 percent of households with telephones had additional lines. By 2000 this number increased almost ten times, to 26.2 percent, but dropped to 24.6 percent in 2001.[20] The growth from 1988 to 2000 may reflect the number of second lines installed for dial-up Internet access, while the decrease from 2000 to 2001 may be due, in part, to the replacement of some of those lines by broadband services such as Digital Subscriber Line (DSL) and cable modems.

As mentioned in the previous section of this report, Congress opened the local market to competition with the 1996 Act. It allowed CLECs to do the following:

1. Resell the retail services of the ILECs.
2. Use the ILEC facilities, in whole or on a piece-by-piece basis. The CLEC could lease separate unbundled network elements (UNEs) or the entire UNE-platform (UNE-P) from the ILEC.
3. Build their own facilities.

In exchange for opening up the local market, the regional Bell Operating Companies (including Qwest[21]) were allowed the opportunity to enter the long distance arena.

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through resale of an entire service or as unbundled network elements. Under the latter option, a competitor might purchase only the use of Qwest's wires, or a combination of Qwest's wires and switching services. If the competitor purchases all of the elements that make up a completed service, then it is purchasing UNE-P, the entire "platform" of the service. Because of the manner in which it is priced and the options it gives to the competitor, UNE-P can be an economical option for serving some customer groups.

[18] 63 percent of the CLEC lines in Iowa are served using UNE-P.

[19] Industry Analysis and Technology Division, Wireline Competition Bureau, *Telephone Subscribership in the United States* (April 2003), cited by Industry Analysis and Technology Division, Wireline Competition Bureau, *Trends in Telephone Service*, August 2003, p. 16-3.

[20] Industry Analysis and Technology Division, Wireline Competition Bureau, *Trends in Telephone Service,* August 2003, p. 7-6.

[21] Qwest was permitted to re-enter the long distance market in Iowa on January 2, 2003. FCC WC Docket No. 02-314, order issued December 23, 2002.

The CLECs have taken advantage of this new opportunity to compete with the incumbent telephone companies. Nationally, the share of the local telephone service market served by CLECs increased from 4.3 percent in December 1999 to 14.7 percent in June 2003.[22] The CLECs increased their number of lines by about 9 percent from December 2002 to June 2003. According to the FCC, CLECs in Iowa have approximately 13 percent of the end-user switched access lines served by reporting local exchange carriers.[23] (This is consistent with the survey results, which showed CLECs in Iowa serve 12.5 percent of the state.)

While the number of CLECs in the nation has grown, the number of CLECs that use their own facilities to provide service has dropped to less than one-third the number there were just a few years ago. Many of these facilities-based CLECs were lost to bankruptcy or liquidation. Currently, CLEC-owned lines account for 23 percent of the total CLEC lines in the U.S., down from 33 percent in December 1999.[24]

Furthermore, CLECs appear to have shifted their strategy from straight resale to UNEs. Nationally, resold lines accounted for 43 percent of the total CLEC end-user lines in 1999, but as of June 2003 they represent just 18 percent.[25] The percentage of lines wireline competitors serve using UNEs has risen from 23 percent in December 1999 to 58 percent in June 2003.[26] In Iowa, CLECs use UNEs to serve 77 percent of their lines (63 percent is UNE-P, 14 percent is other UNE combinations), while resale represents 9 percent. CLECs use their own facilities to serve the remaining 14 percent of their Iowa lines.

As described above, a facilities-based CLEC is one that actually purchases and installs its own equipment, such as a routing switch or the line that goes to the customer's premise. Facilities-based competition is critical for competition to grow and flourish in any market, including that for local telephone service. Without it, competitors will continue to depend upon the incumbent's system and will be constrained in their ability to offer new and different services. At the same time, this dependence upon unbundled network elements and resale is probably necessary, at least for a time, because it can be very expensive to build a new system to duplicate the existing company's local network and other facilities.

When the CLECs choose to resell lines or use the incumbent's unbundled network element loops rather than build their own facilities, they purchase the service elements from the incumbent at a wholesale price, then re-package and market the resulting services as their own. The actual facilities and physical lines, however, are still under the control of the incumbent. This makes it easier for the CLEC to enter the market, but it becomes more difficult for the CLEC to provide products that differ in price or features from those offered by the incumbent.

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[22] Industrial Analysis and Technology Division, Wireline Competition Bureau, *Local Telephone Competition Status as of June 30, 2003, (*December 2003).
[23] Ibid.
[24] Ibid.
[25] Ibid.
[26] Ibid.

While the incumbent may lose retail customers and revenue to competitive local exchange carriers who are reselling their lines or using their UNE loops, the incumbent gets much of this revenue back in the form of the wholesale rates it charges the CLEC. For example, in Iowa, Qwest receives 89.73 percent[27] of its tariffed retail rate when a CLEC chooses to resell Qwest's residential basic exchange access lines. Qwest also receives a flat rate per month from the CLEC that leases Qwest's UNE loops; the rate depends upon the zone and the number of wires per loop.

This does not mean that an ILEC is indifferent when it loses a retail customer to a CLEC that purchases facilities from the ILEC. The loss of the retail customer may mean the loss of other revenues, such as access charges and the sale of enhanced services like call waiting. Still, the loss of a retail customer to a CLEC that is purchasing the ILEC's services means that the ILEC continues to receive some revenues associated with that customer.

B. Wireless Service

Once a luxury service, wireless phones are now considered a necessary convenience by many Americans. In 1984 there were approximately 92,000 wireless subscribers nationwide. By December of 2002 the industry reported about 140 million subscribers.[28] According to Merrill Lynch Equity Research, "as of June 2002, more than 55 percent of Americans between the ages of 15 and 59 had wireless phones."[29] As of June 2003, Iowa has 1.25 million subscribers to wireless telephone service.[30]

When compared to traditional wireline services, wireless telephone service is attractive for a variety of reasons. The most obvious advantage of wireless service is its mobility. Also, wireless phones typically offer bundled service at a fixed price. The bundle may include local and long distance calling plans with features like caller ID, call waiting, text messaging, and voice mail, to name just a few. Bundled services are now being offered by many of the wireline carriers, but they continue to offer basic local service, as well.

In some respects, however, wireless service is not the equivalent of wireline telephone service. One concern associated with wireless service is the quality of the service. Many wireless customers experience dropped calls, poor sound quality, limited network capacity, and lack of coverage. Another concern is the inability of some wireless providers to provide reliable Enhanced 911 service. Most, if not all, of these issues are expected to be addressed over time by advancements in the technology. For example, the FCC has ordered that by December 31, 2005, wireless carriers must provide E911

[27] Iowa Tariff No. 5, Local Wireline Network Interconnection and Service Resale, Rates and Charges, Section 10.6, Resale Services.
[28] Cellular Telecommunications & Internet Association (CTIA), cited by Industry Analysis and Technology Division, Wireline Competition Bureau, *Trends in Telephone Service*, August 2003, p. 11-5.
[29] Merrill Lynch Equity Research, Initiation Report: From Top to Bottom line, Part 1 at 19 (September 19, 2002), quoted in FCC, *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Eighth Report*, at Para. 101 (2003)
[30] Industrial Analysis and Technology Division, Wireline Competition Bureau, *Local Telephone Competition Status as of June 30, 2003 (*December 2003).

systems with more precise location information – within 50 to 100 meters, in most cases.[31]

Initially, wireless service was much more expensive than traditional wireline service. That gap is closing. The average monthly wireless bill has decreased over the past decade. According to the wireless industry, the average monthly bill for wireless service was $48.40 – or 11.3 cents per minute in December 2002, down from December 1993, when the average bill was $68.68, or 43.9 cents per minute.[32]

Currently, wireless is considered by most independent industry observers to be a complementary service for traditional telephone service, rather than a substitute. However, it appears that wireless companies may compete with local carriers for some new growth and as a substitute for second lines in many homes and small businesses. This was noted in a survey commissioned by Qwest that showed 12 percent of Iowa households subscribe to cell service as a substitute for wireline phone service. According to Qwest's survey, these households either removed a second or third line due to cell service or no longer needed multiple landlines because of cell service.[33] This may mean wireless is substituting for second lines that are primarily used for voice services. In some instances, however, customers that wanted an additional wireline from their incumbent carrier were unable to get it, due to unavailability of facilities, and had to use cellular service instead.

The argument that wireless phones are becoming a more general replacement for traditional telephone service is not new, but it has not yet been accepted in the United States as a basis for major regulatory change. For example, on October 20, 2003, ten months after Qwest filed a petition for deregulation in seven Idaho exchanges, the Idaho Public Utilities Commission found that, based on the record made in that proceeding, wireless service did not provide effective competition for traditional telephone service. According to the order in Idaho Case No. QWE-T-02-25, Order No. 29360, "Qwest presented practically no evidence that customers in the seven exchanges are replacing wireline service with wireless service, and instead, it assumed replacement was occurring or could occur based on the significant increase in wireless subscribers in Idaho."[34]

The FCC's recent Triennial Review Order (TRO) supports Idaho's findings. In that order, the FCC stated that "[n]either wireless nor cable has blossomed into a full substitute for wireline telephony."[35] To the Board's knowledge, no state has deregulated wireline local exchange service based on wireless competition.

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[31] http://www.fcc.gov/911/enhanced/.

[32] Cellular Telecommunications & Internet Association (CTIA), cited by Industry Analysis and Technology Division, Wireline Competition Bureau, *Trends in Telephone Service*, August 2003, p. 11-5.

[33] Frederickpolls, *Survey Results Iowa, Qwest Small Business and Residential Customers*, November 2002, page 16. The survey was submitted to the Board in Docket No. INU-03-4. Other parties may have disputed the validity of Qwest's survey, but those disputes could not be resolved after Qwest withdrew from the proceeding.

[34] Idaho order at pp. 11-12.

[35] FCC Triennial Review Order, ¶ 245.

In a recent petition for deregulation of local exchange service in 37 Iowa exchanges, Qwest offered a survey that claimed that 25 percent of wireless phone users in Iowa have replaced their residential wireline service with wireless service.[36] However, according to the FCC, national estimates say that only 3-5 percent of wireless customers use their wireless phone as their only phone.[37] This was supported by the Yankee Group's 2002 Mobile User Survey, which showed that just 3 percent of all wireless customers use their mobile phone as their only phone.[38] The Yankee Group's 2003 survey showed fewer than 4 percent of adult respondents over 24 years of age have abandoned their landline.[39] Qwest did not offer an explanation for the difference between these national figures and the Qwest survey numbers.

C. Cable Telephony

Cable telephony supporters have been announcing for years that the service is almost ready for the general market, but its availability is still limited. For example, in a May 1997 article, one analyst suggested that cable telephony would become more mainstream beginning in 1998.[40] Six years later, in June 2003, there were 3 million residential customers of cable telephony – about 2 percent of the nationwide-switched access lines in service.[41] Typically, cable telephone service is provided in densely populated areas. Currently, most of the service is provided using traditional circuit-switched facilities. However, the future of cable telephony probably lies with a technology known as Voice over Internet Protocol (VoIP), which will use packet-switched facilities, as described in greater detail in the next section of this report.

In Iowa, Cox Communications is currently the only major cable company providing local exchange service. It uses a circuit-switched technology. Cox offers basic local service or bundled services to customers regardless of whether they subscribe to other Cox services. If the customer subscribes to other Cox services, some services are offered at a reduced rate. Cox has a distinct presence in the Council Bluffs market area.

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[36] Docket No. INU-03-4, *Qwest Corporation, Statement of Position and Exhibits of Harry M. Shooshan III*, November 14, 2003. This survey was also submitted to the Board in Docket No. INU-03-4. Again, other parties may have disputed the validity of Qwest's survey, but those disputes could not be resolved after Qwest withdrew from the proceeding.

[37] *Carriers Said to Need New Tactics to Combat LD Substitution*, Communications Daily, March 15, 2002 (citing Yankee Group analyst Knox Bricken's estimate of 3 percent). According to the Cellular Telecommunications & Internet Association, about 2.2 percent of people in the United States have abandoned their wireline phones in favor of wireless phones or other wireless devices, which translates into roughly 5 percent of all wireless subscribers. Yuki Noguchi, *More Cell-Phone Users Cut Ties to Traditional Service*, Washtech.com, December 27, 2001 (citing CTIA). Cited by *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993,* Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Seventh Report, 2002.

[38] The Yankee Group's 2002 Mobile User Survey, cited in *Access line Count Evaporating*, Telephony Online, Vince Vittore, and Glenn Bischoff, October 14, 2002.

[39] The Yankee Group's 2003 Mobile User Survey, cited by Yankee Group News Release, August 5, 2003.

[40] Michael Lafferty, "Cable Telephony Ready to Take Off?", Communication Engineering & Design, May 1997.

[41] Industrial Analysis and Technology Division, Wireline Competition Bureau, *Local Telephone Competition Status as of June 30, 2003 (*December 2003).

Mediacom, another cable provider in Iowa, has the potential to provide competitive telephone service to many Iowans because of its existing cable service, but has not yet entered the local exchange telephone service market. Its offering ultimately may be based on VoIP technology.

The potential for local exchange competition based on cable telephone service is significant. The service lines are already in place, at least in urban areas, and the cable companies have an established business relationship with millions of customers nationally. Moreover, the fact that cable companies already provide television and offer broadband services means they may have the opportunity to offer attractive bundles of services. However, the potential of cable telephony is not unlimited. Cable networks are typically limited to areas of relatively dense customer concentration; cable companies have shown little interest in constructing rural networks to serve customers in remote areas and other high-cost areas.

D. Voice Over Internet Protocol (VoIP)

Voice over Internet Protocol is the transmission of telephone calls over a data network like one of the many networks that make up the Internet.[42] There are four primary ways to use the VoIP technology: computer to computer; computer to telephone; telephone to computer; and, telephone to telephone.

This service has been in existence since the mid-1990s; however, early calls were plagued with echoes, delays, and other quality problems that made the technology unacceptable to the mass market. In recent years, the equipment and technology have improved and the availability of high-speed Internet lines has increased. Nationwide there are approximately 100,000 VoIP callers today, which is less than one-tenth of 1 percent of all telephone subscribers.[43] Although a small number of subscribers are currently using this technology, one observer has estimated that the number will increase to 4 million by 2007.[44]

At present, the FCC does not regulate VoIP as a separate service. As the technology has developed, several issues have arisen, such as the ability of law enforcement officials to engage in wiretaps for law enforcement purposes (as called for in the Communications Assistance for Law Enforcement Act of 1994)**,** the ability for this technology to be compatible with Emergency 911 services, and inter-carrier compensation. Still another issue is the financial support of the federal Universal Service Fund, which subsidizes the cost of telephone service in poor, rural, and high-cost areas. The outcome of these issues could have a large impact on the pricing and availability of VoIP.

[42] http://computer.howstuffworks.com/ip-telephony.htm/printable.
[43] Paul Davidson, "Calling Via Internet Has Suddenly Arrived," USA Today, July 7, 2003, p. 2B.
[44] Ibid.

Regardless of the challenges facing VoIP, the demand for this service continues, primarily because calling via VoIP can be 25 to 30 percent less expensive than traditional phone service. This is, in part, because many VoIP calls avoid some or all of the taxes and fees that apply to traditional calls. VoIP is also attractive because it offers other features which allow customers to manage calls in new ways, such as programming the phone to not ring during certain hours, forwarding calls to other phones, and viewing a log of missed, incoming, or outgoing calls via a Web site.

Nationally, each of the four largest cable companies (Comcast, Cox Communications, Time Warner Cable, and Cablevision) has announced plans to expand VoIP phone services in 2004 in some or all of their major markets. Cablevision has made VoIP phone service available to its high-speed Internet customers in Connecticut, New York, and parts of New Jersey. This Cablevision service includes unlimited local and long distance calls in the U.S. and Canada for $34.95 per month. Cox Digital Telephone, a division of Cox Communications, is set to test its VoIP phone service in Roanoke, Virginia, as early as January 2004.

Recently, others have announced plans to offer VoIP services. Qwest and AT&T both announced in mid-December 2003 that they would be offering Internet phone services to their residential customers. Their plans are to initially market the product as a secondary phone system, not a replacement for traditional service.[45] Qwest plans to offer residential service in Minnesota first, then expand throughout its 14-state region in 2004. AT&T intends to offer service in the top 100 U.S. markets in early 2004. (No Iowa city is currently included in this group.) At this time, the price for these services has not been disclosed by either Qwest or AT&T.

Although VoIP calling plans may offer lower monthly bills than traditional wireline service with similar features and similar amounts of long distance calling, current VoIP technology generally requires a computer and a broadband connection. This could be an added expense, but many current VoIP users already had much of the necessary equipment when they signed up for VoIP service, making the incremental costs relatively low. New VoIP offerings may not require this up-front investment.

E. Broadband Over Power Line

Power line telecommunications is not a new idea, although it is currently not available in the state of Iowa. It has existed for use in the home as a computer-networking medium for many years. Utility companies have used narrowband power line communications to monitor and control devices on the power grid since the first half of the 20th century. During the 1990s, utility and technology companies continued to experiment with higher-bandwidth data transfer across the electric grids in Europe, South America, and the United States. Recent advances in power line communications technology now allow for high-speed broadband communications over medium and low voltage power

[45] Max Jarman, “Arizonans to get Taste of Internet Phone Service,” *The Arizona Republic*, December 12, 2003.

lines. Although this may open new market opportunities, it remains an experimental technology.

If this technology continues to develop, investor-owned electric utilities, municipal utilities, and electric cooperatives could bring broadband services to many customers who otherwise would not have access to broadband technology because they live in rural areas. Several power companies project they will be able to offer broadband for as little as $30 a month.[46] However, many companies are hesitant to invest in this arena due to the uncertainty associated with future FCC action.

Like cable telephony, power line communications has the advantage of using a network that is already constructed. Unlike the cable TV system, the power line grid reaches almost every potential customer, including those in rural and other high-cost areas. However, broadband over power line technology is not yet as well developed as cable telephony. Some have alleged that powerline communications cause excessive radio frequency interference, possibly including radio systems used by emergency services. Until these issues are addressed, widespread use of broadband over power lines is unlikely.

III. COMPETITION IN ILEC MARKETS

A. Overview of Survey Results

To the casual observer, it might appear that there are numerous CLECs offering local exchange telephone service in Iowa. A closer examination of those carriers, however, reveals that the total number of CLECs, by itself, is not a complete measure of competition. Instead, it is necessary to examine the services that are being offered, the geographic limitations on those offerings, and the market shares of the various competitors. Close examination of these other factors reveals that a large number of apparent competitors does not necessarily mean that customers in general have a choice of providers.

For example, the Board's records show that as of July 1, 2003, there were 70 CLECs certified to offer telephone service in one or more Qwest exchanges in Iowa. (This part of the analysis focuses on data from Qwest's service territory because of the relative lack of CLECs in the areas served by Frontier, Iowa Telecom, and the independent incumbents.) Of those 70 CLECs, the survey shows that only 3 held themselves out as offering service to a significant fraction of the general public:

[46] Paul Davidson, “High-Speed Net Service: Coming to a Plug Near You?”, USA Today, April 14, 2003, p. 1B.

Total CLECs holding certificates to serve one or more Qwest exchanges:	70
CLECs not currently doing business in Iowa	17
CLECs that do not offer local service	3
CLECs that offer prepaid services only	8
CLECs that do not offer residential service	5
CLECs that do not offer business service	3
CLECs that offer service in 4 or fewer exchanges	21
CLECs that offer fixed bundled services[47] only	5
CLECs that serve only U.S. Army Reserve centers	1
CLECs that provide wholesale and data services only	1
CLECs that no longer accept new customers	1
TOTAL	65

Of the five remaining CLECs, two are resellers of existing Qwest services, meaning they cannot offer services that are substantially different from the underlying Qwest offerings, either in features offered or in quality of service.[48] The other three are Iowa Telecom Communications[49] which currently offers service in 13 Qwest communities, McLeodUSA which offers service in 37 Qwest communities, and Digital Telecommunications which has a presence in 36 Qwest communities. McLeodUSA and Digital Telecommunications use combinations of their own facilities and resale of existing Qwest services, including UNEs, primarily in urban exchanges. Iowa Telecom Communications uses UNE-P to provide service.

Thus, while 70 CLECs hold certificates to offer local exchange service in some part of Qwest's service territory, most of the CLECs offer choices for only a relatively small number of customers. At the same time, it is clear that a few customers in some exchanges may have multiple choices available to them.

Some CLECs offer bundled services; that is, combinations of local exchange service with other telecommunications-related services such as long distance, Internet access, enhanced services, broadband, or cable television for a flat monthly fee (i.e., no per-minute charges). Typically, the bundle is less expensive than purchasing all of the same services separately, but the overall price is only attractive to customers who already intend to purchase all of the associated services (in other words, premium customers). Some of the incumbent providers have responded with similar bundles.

Other CLECs have chosen to offer service only to certain market niches. For example, several CLECs offer service only to business customers, not residential. Other CLECs offer only prepaid services, typically at relatively high rates and targeted at customers

[47] Bundled services are combinations of local exchange service with other services, such as long distance, Internet access, cable television, or enhanced services.
[48] One of these two resellers primarily offers Internet service and has very few voice customers. The other only offers service in nine Qwest exchanges.
[49] Iowa Telecom Communications is the CLEC affiliate of Iowa Telecom.

who are unable to pass a credit check and obtain traditional service. One CLEC limits its offering to U.S. Army Reserve centers.

At this stage, it is difficult to say whether these different market approaches represent the final market plans of the CLECs or whether they are market entry strategies that will be expanded in the near future. The answer is probably that many of the CLECs have no immediate plans to expand their offering, but just about all of them will enter new markets if they perceive the right opportunity.

As a part of the survey, the Board asked the carriers to describe their advertising activities in Iowa. The responses are consistent with the preceding analysis: A few CLECs advertise their services relatively broadly using multiple media, such as newspaper and radio advertising, bill inserts, and Internet advertising. Many more of the CLECs, however, engaged in very limited advertising activities, such as direct mail or telemarketing.

Of the 56 CLECs that responded to the survey, 18 indicated they did no advertising at all in Iowa. Several of these CLECs are not listed in the local telephone directories where they claim to offer service. Clearly, these CLECs are not currently offering service to the general public; potential customers have no realistic way to identify these CLECs or to call them to inquire about their services. Moreover, when some of the CLECs were contacted (using information included in the CLEC's application for a certificate or from the CLEC's Web site), they indicated they were not currently offering local service in Iowa.

Several other CLECs indicated they relied primarily, or in some cases exclusively, on telemarketing. It appears these tend to be CLECs that are focusing their efforts on a particular market niche rather than the public in general. Others, especially the municipal CLECs, tend to target their advertising to a particular geographic area or community. These CLECs typically hold themselves out as serving any customer who is in the right location, but they decline to serve potential customers outside their preferred service area.

B. Qwest Territory

1. Background

Qwest Corporation, formerly U S West Communications, Inc., provides telephone service to 14 Midwest and Western states, serving 25 million residential and business customers and approximately 16.5 million access lines.

As of November 30, 2003, Qwest serves 126 Iowa exchanges and over 200 communities in Iowa, with a total of around 893,000 access lines. Des Moines is the largest exchange with almost 190,000 Qwest lines, and Bradgate is the smallest with around 100 lines. Qwest serves the most urban customers of any local exchange carrier in Iowa, including the communities of Cedar Rapids, Council Bluffs, Davenport,

Des Moines, Dubuque, Iowa City, and Sioux City, but Qwest also serves a number of rural exchanges (56).

Qwest divides its service territory into three rate groups. Basic monthly rates for residential service range from $10.71 to $12.65, while business rates range from $25.60 to $31.82 per month. Included in the basic rates are Extended Area Service (EAS) charges, which allow customers to make unlimited local calls to other towns for a flat rate.

Qwest has been price regulated since November 7, 1998. The company's price plan allows Qwest to adjust its prices for basic local service based on the annual rate of inflation. The plan also allows Qwest to introduce new services that are not subject to rate regulation by the Board. In addition, Qwest may increase prices for its other regulated services (such as call waiting or call forwarding) by up to 6 percent annually.

Qwest's price regulation plan is periodically reviewed and updated. For example, in 2002 an additional section was adopted that allows Qwest to respond to competition by decreasing its basic rates in a particular exchange or exchanges. As of the date of this report, Qwest has not exercised this option.

2. Survey Results for Qwest Territory

When looking at Qwest's communities as a whole, the survey shows that Qwest serves almost 90 percent of the residential lines and about 70 percent of the business lines in its service territory. Qwest's wireline market share in each individual exchange ranges from a little over 30 percent to 100 percent. Qwest maintains a market share of over 90 percent in 78 of its 126 Iowa exchanges.

The level of competition that Qwest faces in each exchange varies widely because of factors like the urban or rural nature of the exchange, the concentration of business and residential customers, and other differences. In some exchanges, Qwest's competitors have captured a significant share of some, or even most, customer classes. For example, in one exchange the study indicates that one competitor serves more lines than Qwest. In three other exchanges, the local municipal utility serves 50 percent or more of the access lines.

In many of Qwest's urban exchanges competition for business customers appears to be increasing. For example, in 18 Qwest exchanges, one competitor serves at least as many business lines as Qwest does, giving this particular customer class at least two choices for local exchange service.

At the other end of the spectrum, the study shows there are no competitors for Qwest in at least one exchange. In about half of the 56 Qwest rural exchanges,[50] the competitors that are present serve fewer than ten lines. In addition, about one-fourth of Qwest's rural exchanges have only one competitor and over half have just one or two

[50] A rural exchange is defined as having a population of less than 2,500, based on the 2000 U.S. Census.

competitors that serve only a few customers in niche markets. For example, Ionex is the only competitor in two of Qwest's rural communities, and Ionex is no longer accepting new customers in Iowa.[51]

In another example, MCI holds a certificate allowing it to offer residential service in many of the Qwest rural exchanges.[52] However, MCI's tariff makes it clear that most of MCI's residential services include several "custom calling features," such as call waiting, caller ID, 3-way calling, and anonymous call rejection. In addition, most residential offerings also require that the customer select MCI as both its local and long distance provider. These bundled services are relatively expensive and are not attractive to customers looking for plain telephone service.[53] These limitations mean that MCI's offering is not generally available or attractive to many consumers.

Similarly, Z-Tel Communications (Z-Tel) holds a certificate allowing it to offer local exchange service in many of the Qwest communities. However, Z-Tel offers local exchange service only as part of a package of services. All Z-Tel packages include local service, long distance service, and selected custom calling features. Again, this marketing strategy limits the appeal of Z-Tel's services to non-premium customers.

Finally, the survey data shows that 12 CLECs in Qwest's territory have constructed their own networks to provide service, which allows them to offer new and different services and to control their own quality of service. However, each of these competitors serves only one or two Qwest communities, due to the extremely high cost of overbuilding an entire exchange and duplicating Qwest's facilities. Five of these facilities-based CLECs are municipally owned, meaning they are very unlikely to offer service outside their own community.

C. Iowa Telecom Territory

1. Background

Iowa Telecom was founded in late 1999 for the purpose of acquiring the Iowa operations of GTE. On July 1, 2000, Iowa Telecom began providing service to 296 Iowa exchanges. Those exchanges reach into 378 communities, which are generally rural in nature. The largest exchange served is Newton with almost 12,000 access lines. The smallest exchange is Redding, with less than 100 access lines. More than 75 percent of Iowa Telecom's communities have fewer than 1,000 access lines.

Iowa Telecom divides its service territory into 16 rate groups. Basic monthly rates for residential service range from $8.92 to $16.31. Basic monthly rates for business service range from $15.64 to $29.69. Added to the basic rates are mandatory EAS charges. In some cases, Iowa Telecom's EAS charges are substantial. In Dexter, EAS

[51] Based on information received from Ionex's toll-free customer line in December 2003.
[52] MCImetro Access does not currently offer local business service.
[53] MCI offers one residential service that consists of local exchange service only, but it is restricted to customers who previously subscribed to a different service.

adds $16.44 to the basic monthly residential rate and $32.86 to the basic monthly business rate.

In 1995 Iowa Telecom's predecessor, GTE, elected to become price-regulated pursuant to Iowa Code § 476.97(11). As long as GTE operated under price regulation, its rates were no longer subject to traditional rate-of-return proceedings before the Board. Instead, GTE's rates changed according to inflation. When Iowa Telecom acquired the Iowa operations of GTE, it elected to continue the GTE price plan.

Like the other price regulated ILECs, Iowa Telecom has the ability to reduce prices in specific exchanges to meet competition. As of the date of this report, Iowa Telecom has not competed using this option.

2. Survey Results for Iowa Telecom Territory

The competition survey results indicate that Iowa Telecom has local competition in 69 communities. However, in 29 of these communities competitors have captured very small market shares – sometimes only one or two customers. These competitors may be reselling Iowa Telecom's services or leasing network elements from Iowa Telecom, such as loops, to provide service.

In the 40 communities where competition is more significant, it comes from several sources. Some competition comes from independent telephone companies that serve adjacent exchanges, which have extended their own networks into parts of Iowa Telecom's territory. In total, there are 26 communities where independents compete with Iowa Telecom using their own networks. In these communities, the independents have gained market shares between 13 and 97 percent. Municipal telephone utilities also provide competitive telephone service using their own networks in seven Iowa Telecom communities, where they have gained market shares between 29 and 64 percent.

By virtue of building their own networks, the independent and municipal competitors may have newer and more advanced facilities that allow them to offer services Iowa Telecom cannot readily match. In some cases, this has helped them to gain market share even when their rates are somewhat higher than Iowa Telecom's rates.

In some of the communities with measurable competition, Iowa Telecom competes with two other carriers who have gained a relatively large number of business customers. The first is LTDS, a competitive carrier from Fairfield, Iowa. Currently, LTDS is providing business-only service to a number of customers in six communities. LTDS provides its service using a combination of its own facilities and Iowa Telecom's facilities. The other is AT&T, which provides business-only data service in 20 Iowa Telecom communities. In these exchanges, AT&T is a specialized facilities-based carrier and leases facilities from Iowa Telecom only as necessary to make the final connection to the customer.

The survey confirms that competitors have gained large market shares in some Iowa Telecom exchanges. However, when the 69 competitive communities are taken as a group, the survey shows that Iowa Telecom maintains about 85 percent of the residential market and about 67 percent of the business market. Systemwide, when all 378 Iowa Telecom communities are grouped, Iowa Telecom maintains about 93 percent of the residential market and about 81 percent of the business market.

D. Frontier Territory

1. Background

Frontier Communications of Iowa (Frontier) is a subsidiary of Frontier Telco, Inc., which in turn is a subsidiary of Citizens Communications Company. In January 2001 the Board approved a reorganization proposal which brought Frontier Communications of Iowa under Citizens' corporate umbrella. Today, Citizens and its Frontier subsidiaries operate in parts of 24 states and provide local exchange service to approximately 2.5 million access lines.

In Iowa, Frontier provides service to approximately 62,000 access lines in 37 exchanges, which serve 49 communities. Most of these communities are located in western and north central Iowa. Census data indicates that most of Frontier's Iowa communities have populations under 1,000. The smallest exchange Frontier serves is Nemaha, with less than 150 access lines. The largest town Frontier serves is Fort Dodge with almost 20,000 access lines.

Frontier divides its service territory into three rate groups. Basic monthly rates for residential service range from $7.48 to $17.73. Basic monthly rates for business service range from $13.48 to $35.77. In most exchanges there are mandatory EAS charges that are added to basic rates. These charges add up to $3.02 to the basic monthly residential rate and $5.42 to the basic monthly business rate.

In 1995, Frontier elected to become price-regulated pursuant to Iowa Code § 476.97. As long as Frontier operates under price regulation its rates are not subject to traditional rate-of-return regulation. Instead, Frontier's rates are allowed to change based on the rate of inflation.

Under its price regulation plan, Frontier is also allowed to reduce prices in one or more exchanges in order to respond to competition. Under this provision, Frontier can lower rates in competitive exchanges as long as it does not attempt to recover the revenue losses by charging higher rates in non-competitive exchanges. To date, Frontier has not made a filing to reduce rates in a competitive exchange.

2. Survey Results for Frontier Territory

The competition survey shows that Frontier has local competition in four of its 49 communities, but only for business customers. Currently, there are no competitors

serving residential customers in Frontier's territory and Frontier maintains a 100 percent market share in residential service and a 99 percent market share in business service.

In two of the four competitive communities, competitors have captured only one customer in each community. In the other two communities, AT&T provides a business-only data service to a small number of customers. In those two exchanges, AT&T is a specialized facilities-based service provider; it does not lease any UNEs from Frontier to provide service. In a recent filing, Frontier indicated that it leases no UNEs to any competitive carrier in Iowa.

The survey shows that the most significant competition in Frontier's territory comes from a municipal telephone company. The municipal utility provides service by building its own network. At this time, the municipal has captured less than 10 percent of the business market in the town it serves. It is possible that this municipal will capture additional market share as it continues to build its new network within its boundaries.

E. Independent Telephone Companies

1. Background

There are 158 non-rate-regulated independent telephone companies that provide local telephone service in Iowa. Each of these independents serves a distinct service territory. Generally, these independents do not compete for the customers of other independent telephone companies. They are not subject to the Board's ratemaking authority but are subject to the Board's service regulations, such as the filing of tariffs and the Board's authority to hear customer complaints.

The independent telephone companies vary in size. Many of them serve just a single exchange in a single town. For example, Miller Telephone Company of Garner, Iowa, serves just over 100 access lines. At the other end of the range, Heartland Telecommunications Company of Iowa, d/b/a HickoryTech, serves over 13,500 lines in 11 exchanges which reach into 16 Iowa communities. About half of Iowa's independents service fewer than 1,000 loops.[54]

The rates charged by independent telephone companies for basic local exchange service are variable, but they are generally comparable to, or lower than, the rates charged by the larger ILECs. The independents, however, have additional revenue sources that may not be available to the larger telephone companies. First, the independents are eligible to receive Federal Universal Service Fund support to subsidize the high cost of providing loops in rural areas.[55] Qwest, Iowa Telecom, and Frontier do not receive this support in Iowa.

[54] Universal Service Fund 2003 Submission of 2002 Study Results by the National Exchange Carrier Association, Inc. dated October 1, 2003.

[55] High cost loop support provides funding for the "last mile" of connection for rural companies in service areas where the cost to provide this service exceeds 115 percent of the national average per line. See: www.universalservice.org/hc/components/loop.asp

Second, although all local telephone companies collect fees from long distance companies for use of the local network to complete long distance calls (known as access services), the access fees charged by small independents are generally higher than the access rates of the larger ILECs. Some independents use these extra revenue sources to keep their rates low and to provide advanced services, such as broadband, to many of their customers.

2. Survey Results for Independent Telephone Company Territories

Responses to the competition survey show that the independent telephone companies as a group serve about 235,000 access lines in 419 Iowa communities. Competitive local exchange service has emerged in only 31 of the 419 communities. In 24 of the 31 competitive communities, CLECs serve no more than a handful of residential customers – often just a single customer. These CLECs lease the facilities and services of the independent telephone companies to provide their competitive telephone service.

In five communities, AT&T and McLeodUSA have captured some of the business market – less than 40 business lines per community. These numbers represent market shares of fewer than 5 percent.

Finally, there are two competitive communities where municipal telephone utilities have built their own networks and gained market shares ranging from around 20 percent to almost 70 percent.

In conclusion, the small size of the independents appears to leave them less vulnerable to local exchange competition. Currently, there are only two Iowa communities served by independent telephone companies where competitors have gained substantial market shares. Those communities are served by municipal utilities. In five additional communities, AT&T and McLeodUSA have gained small market shares competing for business customers. On a statewide basis, however, the independent telephone companies continue to serve over 99 percent of customers located in their communities.

F. Municipal Telephone Utilities

1. Background

In the late 1990's, a small number of municipal utilities began providing telecommunications services in their communities. Today, there are 14 municipal providers offering telecommunications services. The municipal telecommunication providers typically compete with the incumbent telephone company by constructing new facilities within their community. The build-out of these new facilities is generally limited to the developed urban areas within the local exchange. Some of the municipal telecommunications utilities offer service to rural customers via an agreement with the incumbent telephone company. These municipals are reselling the ILEC's local telephone service to the rural customers.

Thirteen of the 14 municipal telecommunications utilities provide service in only one community and exchange, although one provides service in four different communities. The communities with a municipal telecommunications utility range in population from approximately 900 to over 11,000. There is only one community with a population greater than 6,000. The remaining communities have populations of less than 6,000, with ten of these communities below 2,000 in population. These population levels are based on 2000 census data.

2. Survey Results for Municipal Telephone Companies

In some instances the municipals have seen significant success. In February of 2001, a municipal witness testified before the Board estimating the municipal utility market share at 80 percent of the access lines in their community.[56] In the same proceeding, another municipal indicated it served about 750 of the community's 1,100 access lines. This estimate reflects a market share of approximately 68 percent.

The municipal utility responses in the recent survey reflect significant market share penetration by many of the municipals. The survey shows a range of market share from less than 5 percent to almost 70 percent. There are several factors that may be contributing to the municipals' success. New facilities and the ability to offer advanced services, such as high-speed Internet access, are advantages for the municipals. Another advantage is related to the economic development interests of the community. By purchasing service from the municipal provider, residents and businesses keep dollars in their community and support the entity that brought them advanced services.

IV. CONCLUSIONS

The beginning of this report outlined the policy of the State that communications services should be available throughout Iowa from a variety of providers at just, reasonable, and affordable rates. Under the law, the Board has the duty to deregulate a communications service or facility if it determines that the service or facility is subject to effective competition. In making this finding the Board is required to determine: (1) whether there are multiple providers of a service; and, (2) whether existing market forces are sufficient to ensure just and reasonable rates without regulation. The second finding requires a careful examination of the relevant facts and the exercise of judgment based on sound economic theory, activities that are beyond the scope of this survey.

However, this survey was conducted by the Board to evaluate the first condition: whether there are multiple providers of a service, which in this case is local telephone service. Several conclusions can be drawn from this report:

[56] In re: FiberComm, LLC, et al., Docket No. FCU-00-3, transcript pp. 468 and 533.

- **Most local exchange telephone customers in Iowa do not have a significant choice of providers.**

Based on the results of the Board's survey, it appears that most local exchange telephone customers in Iowa do not have a significant choice of providers. While the Board has issued numerous certificates to potential competitors, the majority of those companies are only offering service in limited geographic areas or to limited customer classes.

- **Some customer classes in some exchanges appear to have a choice.**

Based on the survey results, some customer classes in some exchanges appear to have a choice. For example, business customers in the larger urban exchanges or residential and small business customers seeking second or third lines for voice-grade service have options available.

- **Local telephone competition is emerging as a significant factor in a few areas of the market.**

Overall, the survey shows that local telephone competition is emerging as a significant factor in a few market segments. However, the existing competition is concentrated in a few areas, primarily urban areas and communities where independents and municipal telephone utilities have built new networks. The characteristics of these competitors are likely to limit the growth of competition from these sources. Urban competitors, to date, show little inclination to expand into rural areas, and municipal utilities, by nature, are reluctant to expand their service territory much beyond their municipal boundaries.

- **Overall, incumbents continue to maintain a significant portion of market share.**

Generally, incumbents continue to provide service to most of the voice customers in their serving areas. Statewide, the incumbents serve 92 percent of the residential market and 77 percent of the business market. Qwest serves about 90 percent of the residential customers and 70 percent of the business customers in its serving area. Iowa Telecom serves 85 percent of residential customers and 67 percent of business customers. Frontier maintains a 100 percent market share for residential and 99 percent for business. Independent telephone companies continue to furnish service to 99 percent of all customers in their serving areas.

- **The growth of local exchange competition in Iowa is affected by a variety of factors.**

While not directly a part of the survey results, it is clear that the growth of local exchange competition in Iowa is affected by a variety of factors. This includes general economic conditions; the telecommunications sector was hit hard by the recent downturn in the economy, slowing the growth of the competitors. Another factor

contributing to uncertainty in the marketplace is the pending FCC action on UNE rates and UNE-P availability in Qwest's service territory. UNEs are very important to CLECs; they use them to serve 77 percent of their Iowa lines. If the FCC decisions make this alternative uneconomic or unavailable, those CLECs may have no viable business plan for Iowa. Investors are often reluctant to commit funds to a market plan that may be rendered obsolete by an FCC decision. Even such factors as the new federal "Do Not Call" list may have an effect, as many CLECs rely on telemarketing to a significant degree and may find it more difficult to reach their intended customers.

- **New technology will probably provide the necessary catalyst for future growth and competition.**

Looking toward the future, it is clear that new cable telephone providers could provide more choices for residential customers in urban areas. Different wireless packages, improved service quality, and technological advances could make wireless service more comparable to wireline service, offsetting some of the existing disadvantages. Broadband over power lines may offer the greatest potential for change due to the existence of a pre-established universal network, but this alternative is probably the farthest from being market-ready. Thus, new technologies on the horizon are likely to increase telecommunications choices for Iowans in the years ahead.

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Iowa Utilities Board
Telecommunications Competition Survey for Retail Local Voice Services

ATTACHMENT A

COVER LETTER AND SURVEY INSTRUMENT

Fields of Opportunities

STATE OF IOWA

THOMAS J. VILSACK
GOVERNOR
SALLY J. PEDERSON
LT. GOVERNOR

IOWA UTILITIES BOARD
IOWA DEPARTMENT OF COMMERCE

August 4, 2003

The Iowa Utilities Board (IUB), with this letter and attached survey, is assessing the level of competition for retail voice services within the state of Iowa. This survey is being sent to local exchange carriers, local service resellers, a cable operator, and wireless carriers that may be providing retail local service as part of their service products. Completion of this assessment will give the IUB the ability to respond to requests for information on the level of retail local service competition in all areas of the state.

Results and findings of the IUB's assessment will be available on the Utilities Board Web site at www.state.ia.us/iub once all of the data is gathered and processed. While the survey asks for actual counts of retail local service connections, the final assessment report will only reveal a percentage of competition by community.

The Iowa Utilities Board requests your assistance by responding to the attached survey, which is also available online at www.state.ia.us/iub in Word format and can be downloaded for your use. Please complete and return the survey by September 2, 2003, (either electronically or through conventional mail) to:

Larry Stevens
Iowa Utilities Board
350 Maple Street
Des Moines, IA 50319
E-Mail: larry.stevens@iub.state.ia.us
Telephone Number: 515-281-4725, Fax: 515-281-5329

Your input is vitally important to the success of this assessment. If you require any further information, please feel free to contact the Iowa Utilities Board.

Sincerely,

Diane Munns	Mark Lambert	Elliott Smith
Chairman	Board Member	Board Member

Iowa Utilities Board
2003 Telecommunications Competition Survey for Retail Local Voice Services

Competition Survey Instructions and Guidelines

This survey only addresses retail local voice services being provided to consumers within the state of Iowa. This survey instrument is divided into three sections. Part I of this survey requests a physical count on the number of customer connections for which a service provider is billing consumers for retail local voice service. Part Two requests information on the recurring monthly pricing of the retail local voice services offered to consumers. Part III asks for information on how your organization advertises the availability of services to consumers. All requested information is as of **July 1, 2003**. Listed below are a few definitions taken in part from the Iowa Administrative Code (IAC) that should help in defining the scope of this survey.

"Local service" means telephone service furnished between customers or users located within an exchange or service area. (Follows IAC 199-22.1(3))

"Exchange area" or "Service area" means the general area in which the telephone utility holds itself out to furnish local telephone service. (Follows IAC 199-22.1(3))

For the purpose of this survey, Retail Local Voice Service Connections or the functional equivalent are facilities that provide voice grade access to the public switched network that includes local usage, dual tone multifrequency signaling or its functional equivalent, access to emergency services, access to operator services, access to interexchange services, and access to directory assistance. Toll limitation for qualifying low-income consumers is not included in this list of functionalities since carriers requesting federal "Eligible Telecommunications Carrier (ETC)" status have been granted a waiver of this provision. This definition follows Iowa Administrative Code 199-39.2(1).

PART I: Customer Connections

The purpose of this portion of the survey is to obtain actual counts of the number of retail local voice service connections being furnished by each carrier to end users or customers in the various communities of Iowa. Many different types of

facilities and technologies are used within the state to provide retail local voice services. Count customer connections based on how customers are billed rather than how services are provisioned. For the purpose of this survey, retail local voice services or the functional customer connection equivalents must be capable of providing service functionalities as defined in the previous paragraph and must be producing billed revenues for the service provider.

Column ------ Column Description ---------- Explanation

(a) Community Name – Community Name
(b) Exchange Name or Service Area – General area or location where telephone service utility holds itself out to furnish retail local voice service.
(c) Service Provider Type – Incumbent or Competitor
(d) How the Service is Provisioned:
    F = Facility Based owned by the provider
    U = Service provided using leased or purchased UNEs
    R = Service provided through the use of resale facilities.
    C = Service provided by using a combination of owned facilities and purchased UNEs
(e) NPA-NXX – Each Number Plan Area-NXX as assigned to your organization by NANPA.
(f) Number of Retail Local Service Connections or Functional Equivalent for each NPA-NXX – Numerical count of the quantity of retail local voice connections provided to end users. Please provide counts, if possible, based on the service being provided as being residential (RES) or business (BUS). If offered services are not distinguished as either residential or business, enter the counts in the combination (COMB) column.

PART II: Pricing Information

The purpose of this portion of the survey is to obtain pricing information on Retail Local Voice Service. Local service providers often provide numerous calling plans for consumers in specific areas and local service plans vary by service provider. Please list all the local service plans offered in each of the exchanges or service areas where service is provided. Local service plans or packages may also include other services, such as regional toll calling, custom calling features, or extended area calling service.

Column ------ Column Description ---------- Explanation

(g) Exchange Name or Service Area – Same as column (b).
(h) NPA-NXX – Same as Column (e).
(i) Type of service or service plan – Common name of the service or plan as sold by the service provider.
(j) Monthly Rate – Recurring monthly dollar amount for the service being provided.
(k) Recurring Monthly End User Charges – Charges added to the consumer billing as part of the charges for receiving service.
(l) Other Monthly Recurring Charges – Charges that are added to the end users bill that are not usually considered to be part of the rates for recovering the costs associated with the service. These charges could include assessments for 911/E911, property tax surcharges, number portability charges or local fees, taxes, and surcharges. Do Not Include Federal Universal Service Charges, state, or federal taxes. Please identify each charge.
(m) Service or Service Plan Details – Briefly describe the service and the components of each plan. Explanations could include: residential single line service, business multiline service, includes custom calling features, regional calls included, 500-minute plan with 120 minutes of 7:00 AM to 7:00 PM usage, etc.

PART III: Advertising / Marketing

This section of the survey is structured to gather information on how service providers advertise or market their retail local services. If your organization has advertised in Iowa in the past twelve months please respond to the questions in this section and provide copies of written or printable advertisements.

Please return the completed survey no later than September 2, 2003. Electronic copies of this survey can be found on the Iowa Utilities Board web site at http://www.state.ia.us/iub. Should you have questions concerning this survey, contact Larry Stevens at (515) 281-4725 or at larry.stevens@iub.state.ia.us. Jane Whetstone may also be contacted at (515) 281-3173 or at jane.whetstone@iub.state.ia.us. Completed survey forms can be returned by US mail to Larry Stevens, Iowa Utilities Board, 350 Maple Street, Des Moines, Iowa 50319. Electronic replies should be returned to larry.stevens@iub.state.ia.us.

Iowa Utilities Board
2003 Telecommunications Competition Survey for Retail Local Voice Services
As of July 1, 2003

Company Name _____ Address _____

Contact Person _____ Telephone number _____ Fax # _____

E-Mail Address _____

1.) Does your company currently provide local telecommunications retail voice service in the State of Iowa?

Yes ☐ No ☐

2.) If yes, what type of Service provider:

ILEC ☐ CLEC ☐ Cable ☐ Wireless ☐ Other ☐ Explain: _____

3.) Please use the worksheet formats in the following three pages to provide information on the communities and locations in Iowa where you provide retail local voice services. Create additional pages as needed to complete this survey.

PART I - Customer Connections

Community Name (a)	**Exchange Name or Service Area (b)**	Service Provider Type: I=Incumbent **C=Competitor (c)**	**How the Service is Provisioned: F = Facilities Based U = UNEs R = Resale C = Combination (d)**	**NPA-NXX (e)**	**Number of Local Voice Service Connections or Functional Equivalents for Each NPA-NXX (f)**		
					RES	BUS	COMB

Iowa Utilities Board
2003 Telecommunications Competition Survey for Retail Local Voice Services
As of July 1, 2003

PART I - CONTINUED

Company Name

Community Name (a)	Exchange Name or Service Area (b)	Service Provider Type: I=Incumbent C=Competitor (c)	How the Service is Provisioned: F = Facilities Based U = UNEs R = Resale C = Combination (d)	NPA-NXX (e)	Number of Local Voice Service Connections or Functional Equivalents for Each NPA-NXX (f)		
					RES	BUS	COMB

Iowa Utilities Board
2003 Telecommunications Competition Survey for Retail Local Voice Services
As of July 1, 2003

PART II – Service Rates

Company Name

Exchange Name or Service Area (g)	NPA-NXX (h)	Type of Service or Service Plan (i)	Monthly Rate $.$$ (j)	Recurring Monthly End User Charges $.$$ (k)	Other Monthly Recurring Charges – Identify Each $.$$ (l)	Service or Service Plan Details (m)

2003 Telecommunications Competition Survey for Retail Local Voice Services
As of July 1, 2003

PART III – Advertising / Marketing

Company Name

3.1.) During the past 12 months (July '02 – June '03) has your organization advertised the availability of retail local service, by itself or included as a service in a package offering, to any consumers in the State of Iowa?

3.2.) Yes ☐ No ☐

3.3.) In how many months of the last 12 did your organization advertise? _____(answer: 0-12)

3.4.) If you answered yes to question #1, how has your organization advertised (mark all that apply):

_____ Newspaper _____ Radio _____ Telemarketing

_____ Television _____ Billing Insert _____ Telephone Directory/Book

_____ Internet (other than web site) _____ Direct Mailing

Other, Please list each:

_____
_____
_____
_____
_____
_____

3.5.) If the advertisement has been in a written or printable format, please attach a photocopy of each advertisement to the completed survey. If the survey is being completed in an electronic format, advertisements can be scanned and returned as electronic files.

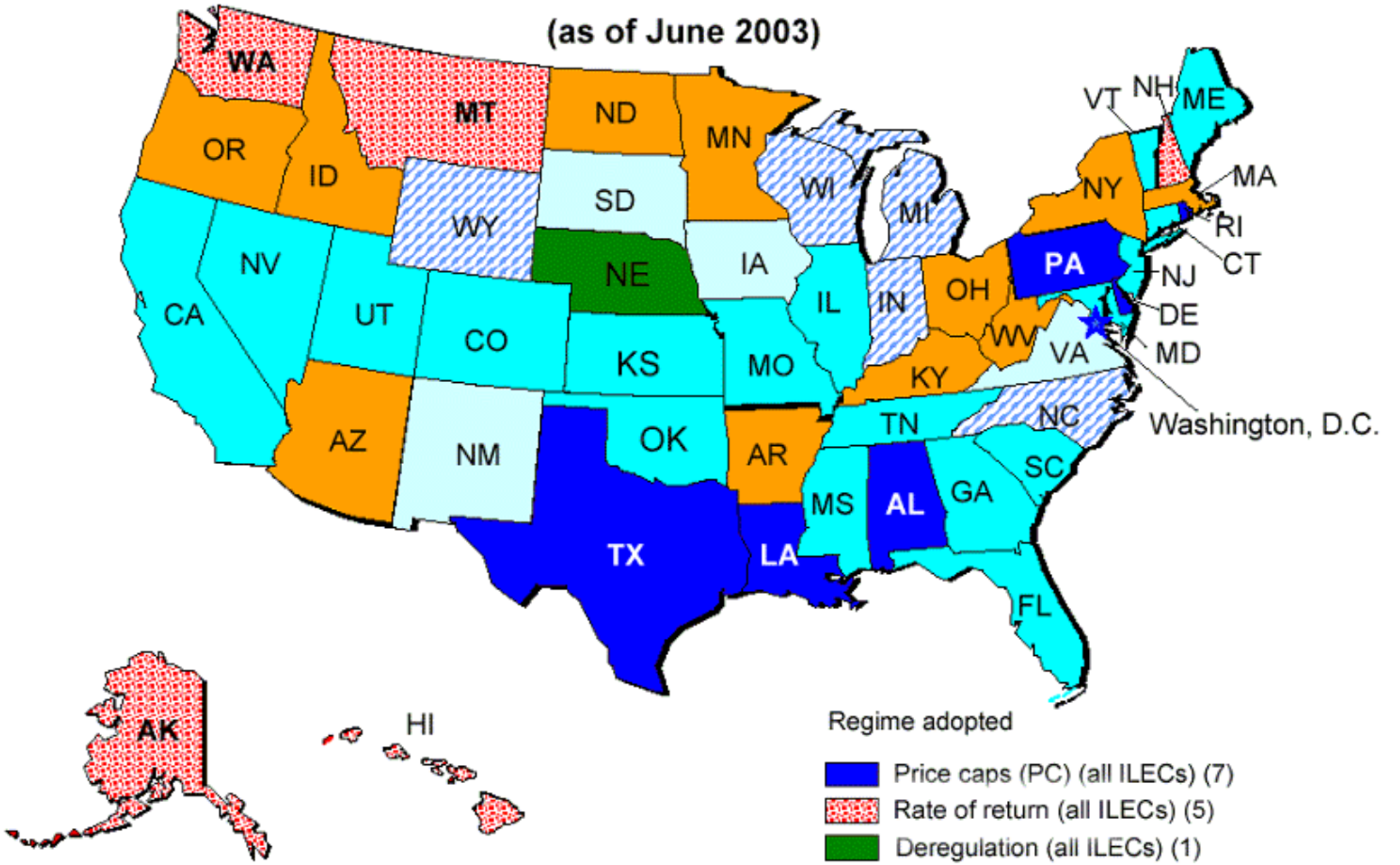
Iowa Utilities Board
Telecommunications Competition Survey for Retail Local Voice Services

ATTACHMENT B

U.S. MAP -- RETAIL RATE REGULATION
OF
INCUMBENT LOCAL EXCHANGE PROVIDERS

Retail Rate Regulation of Incumbent Local Exchange Providers

(as of June 2003)



Source: *State Telephone Regulation Report*, May & June 2003, Vol. 21 (No. 9-11)

The National Regulatory Research Institute

Iowa Utilities Board
Telecommunications Competition Survey for Retail Local Voice Services

ATTACHMENT C
COMPETITIVE LOCAL EXCHANGE CARRIERS PROVIDING RETAIL VOICE SERVICE IN IOWA
as of July 1, 2003

NOTE: The market areas for competitive retail voice service providers are geographically limited within the state.

Companies Not Providing Retail Voice Services in Iowa

(Listing includes organizations currently certified by the Iowa Utilities Board as local exchange service providers, have approved applications on file, or were previously approved)

1-800-Reconex, Inc.
Adelphia Business Solutions
Alticomm, Inc.
CI2, Inc.
DPI-Teleconnect
Geneseo Communications
Goldfield Communications
Independence Telecommunications Utility
Intermedia Communications, Inc.
Integra Telecom of Iowa, Inc.
Ionex Telecommunications, Inc.
KMC Telecom V, Inc.
North West Rural Electric Coop.
NOW Communications
OneStar Long Distance, Inc.
Premiere Network Services, Inc.
Primus Telecommunications, Inc.
Talk America, Inc.
Ter Tel Enterprise, Inc.
Universal Access, Inc.

Companies Offering Residential and Business Retail Voice Services

American Telco of Iowa
Crystal Communications, Inc., d/b/a HickoryTech
Digital Telecommunications, Inc.
Frontier Communications of America
Granite Telecommunications, L.L.C.

Ionex Communications North, Inc. (no longer accepting new customers)
Iowa Telecom Communications, Inc.
McLeodUSA
Preferred Carrier Services, Inc.
TRX, Inc.
Twin Rivers Valley Telephone

Companies Offering Service in Four or Fewer Exchanges

Advanced Network Communications, LLC
Algona Municipal Utilities
Alta Municipal Broadband Communications Utility
BTC d/b/a Western Iowa Networks
Cedar Communications, LLC
Cedar Valley Communications.
City of Hawarden-HITEC
CommChoice of Iowa
Coon Creek Telecom
Coon Rapids Municipal Communications Utility
Corn Belt Communications
Cox Iowa Telcom, LLC
CS Technologies
Farmers & Businessmen's Tele. Co.
Farmers Mutual Coop. Tel. Co.
Farmers Mutual Telephone Co, d/b/a OmniTel
FiberComm
Forest City Telecom
Goldfield Networks Access
Grundy Center Communications
Guthrie Telecom Network
Harlan Municipal Utilities
Heart of Iowa
Huxley Comm. Coop.
Independent Network
Laurens Municipal
Long Lines Metro
Lost Nation-Elwood Telephone Co.
Louisa Communications
Mahaska Communications
Mapleton Community Management Agency
Orange City Municipal
Osage Municipal Telecomm.
Partner Comm. Coop.
Prairiewave Telecommunications
Reinbeck Municpal Telecommunications Utility, Inc.

SNG Communications, LLC
Spencer Municipal Communications Utility
The Community Agency

Companies Offering Business Retail Voice Service Only

AT&T Communications of the Midwest
Local Telephone Data Services Corp. (LTDS)
Microtech-tel (iLoka, Inc.)
Quantumshift Communications, Inc.
TGC Omaha

Companies Offering Residential Retail Voice Service Only

Choicetel, LLC
MCI Metro Access Transmission Services, LLC
New Access Communications, L.L. C.

Companies Offering Prepaid Retail Voice Services Only

BG Enterprises d/b/a Grizzly Telephone
CAT Communications International
Comm South Companies, Inc.
Fast Phones of Nebraska, Corp.
Houlton Enterprises, Inc. d/b/a Guaranteed Phone Service

Companies Offering Fixed Bundled Service Only

Excel Telecommunications
Orbitcom
VarTec Telecom, Inc.
Z-Tel Communications, Inc.

Companies Offering Wholesale and Data Services Only

Universal Access, Inc.

Companies Not Responding to Survey

Advanced Network Communications
AllTel Nebraska, Inc.
Budget Phone, Inc.
Bulls Eye Telecom, Inc.
Clemmons Communications, Inc.
Manning Municipal Comm. & TV System Utility
Nexgen Integrated Communications, L.L.C
USA Quick Phone, Inc.

Iowa Utilities Board
Telecommunications Competition Survey for Retail Local Voice Services

ATTACHMENT D
NON-RESPONDERS – NO INFORMATION RECEIVED

Wireless

AT&T Wireless
Benton/Linn Wireless, LLC
Cricket
Great Lakes of Iowa
Iowa RSA 7
Iowa RSA 10 General Partnership
Iowa RSA#11, LLC
Iowa RSA#12, LLC
Iowa RSA#3, LLC
Iowa 8 -Monona Limitied Partnership
Midwest Wireless Iowa LLC
NSP, LC
Qwest Wireless
Sprint PCS
Swiftel Communications
T-Mobile f/n/a VoiceStream
Verizon Wireless
Virgin Mobile Telecoms Ltd
WWC LLC Lic

CLECs

Advanced Network Communications
: Per Tariffs filed with IUB – Provides residential and business voice services in Correctionville & Lake View.

AllTel Nebraska, Inc.
: Per Tariffs filed with IUB – Provides residential and business voice services in Council Bluffs

Budget Phone, Inc.
: Per Tariffs filed with IUB – Provides business voice services in Qwest exchanges

Bulls Eye Telecom, Inc.
: Per Tariffs filed with IUB – Provides residential and business voice services in Qwest exchanges

Clemmons Communications, Inc.
: Per Tariffs filed with IUB – Provides residential and business voice services in various Qwest exchanges

Manning Municipal Comm. & TV System Utility
Per Tariffs filed with IUB – Provides residential and business voice services in Manning

Nexgen Integrated Communications, L.L.C.
Per Tariffs filed with IUB – Provides residential and business voice services in Des Moines

USA Quick Phone, Inc.
Per Tariffs filed with IUB – Provides residential voice services in Qwest and Iowa Telecom exchanges

LECs

Alliance Communications Cooperative, Inc.
Per Tariffs filed with IUB – Provides residential and business voice services in E. Hudson

Atkins Telephone Company, Inc.
Per Tariffs filed with IUB – Provides residential and business voice services in Atkins

Breda Telephone Corporation
Per Tariffs filed with IUB – Provides residential and business voice services in Breda, Lidderdale, Macendonia

Farmers Telephone Company of Batavia
Per Tariffs filed with IUB – Provides residential and business voice services in Batavia

Fenton Cooperative Telephone Company
Per Tariffs filed with IUB – Provides residential and business voice services in Fenton

Hills Telephone Company, Inc.
Per Tariffs filed with IUB – Provides residential and business voice services in Alvord, Inwood, Larchwood, Lester, Steen, Hills (MN)

Lone Rock Cooperative Telephone Company
Per Tariffs filed with IUB – Provides residential and business voice services in Lone Rock

Lynnville Telephone Company
Per Tariffs filed with IUB – Provides residential and business voice services in Loneville

Woolstock Mutual Telephone Assn.
Per Tariffs filed with IUB – Provides residential and business voice services in Woolstock